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**Kemper et al.**

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(54) **STRUCTURAL TUBE BASED MOVABLE  
VEHICLE CRASH BARRIER GATE**

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(2013.01)

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USPC ..... 404/6, 9, 10, 11; 256/13.1  
See application file for complete search history.

(57) **ABSTRACT**

A vehicle crash barrier gate constructed primarily of structural tube members and having an energy-absorbing connection between horizontal movable gate member and vertical post members. The gate member is provided with one or more deformable flanges adjacent to each end. Each post includes a vertically extending channel for receiving a respective gate member end and the flanges. An inwardly facing, vertically aligned opening in each channel allows the gate member to extend therethrough and span the space between the posts. The vertical extent of the openings spans the required vertical movement of the gate member. One or more reinforcing elements are disposed on the posts proximate to the elevation at which the gate member is positioned to prevent vehicle passage to strengthen the vertical post structure. A drive apparatus is provided to move the gate member vertically between an open position, typically at grade level, and a closed position, typically elevated above grade level.

**20 Claims, 5 Drawing Sheets**

